Amendments to the Specification:

Please replace two paragraphs from page 3, line 9, with the following amended paragraphs:

Sixthly, the present invention provides a method of producing a single-crystal material for a quantum wire device. The method comprises: compressing a single-crystal blank made of ceramic or metal, from a direction allowing the activation of a single slip, in a temperature range of a brittle-to-ductile transition temperature to about a melting point of the single-crystal blank to induce plastic deformation therein, and subjecting the resulting product to a heat treatment at a high temperature of one-half or more of the melting point by absolute temperature, to provide a single-crystal material internally having dislocations arranged one-dimensionally on respective straight lines at a high density of 10^6 to 10^{14} / cm^2; and subjecting the single-crystal material to a diffusion treatment to diffuse metal atoms from the surface of the single-crystal material to form quantum wires arranged along the corresponding dislocations at a high density of 10^6 to 10^{14} / cm^2.

Seventhly, the present invention provides a method of producing a single-crystal material for a thin film device. The method comprises: compressing a single-crystal blank made of ceramic or metal, from a direction allowing the activation of a single slip, in a temperature range of a brittle-to-ductile transition temperature to about a melting point of the single-crystal blank to induce plastic deformation therein, and subjecting the resulting product to a heat treatment at a high temperature of one-half or more of the melting point by absolute temperature, to provide a single-crystal internally having dislocations arranged one-dimensionally on respective straight

lines at a high density of 10^6 to 10^{14} / cm^2; and subjecting the single-crystal to annealing or chemical etching to form nano-hole bundles along the corresponding dislocations.